

Claim 15 (Once Amended) The method of claim 10 wherein the polymerization catalyst further comprises a carrier and [,] an activator [, and a bulky ligand metallocene-type catalyst compound].

Claim 20 (Once Amended) A method of making a catalyst composition, the method comprising the steps of:

- (a) forming a polymerization catalyst comprising a bulky ligand metallocene-type catalyst; and
- (b) adding at least one carboxylate metal salt.

Cancel claim 21.

Cancel claim 22.

### **REMARKS**

Applicants respectfully request reconsideration in light of the above amendments and the following remarks

Claims 1 to 120 are pending in the application.

Claims 40 to 120 are withdrawn from consideration in response to a restriction requirement.

Claims 1 to 39 are rejected.

Claims 1, 10, 15 and 20 have been amended.

Claims 2, 3, 11, 12, 21 and 22 have been canceled.

Claims 1, 4 to 10, 13 to 20 and 23 to 39 remain in this application.

The Examiner has required a restriction requirement under 35 U.S.C. §121 in which Invention I includes claims 1 to 39 (Group I), drawn to a catalyst and a process of making such, classified in class 502, subclass 102 and Invention II includes claims 40 to 120 (Group II), drawn to a process of polymerizing olefin, classified in class 526, subclass 108. The Examiner states that Invention I and Invention II are distinct, each from the other because they are related as a product and process of use. The Examiner concludes that restriction is proper because a different catalyst can be used for polymerizing olefins and that Inventions I and Invention II have acquired a separate status in the art by reason of their different classification. Applicants respectfully suggest that it would be more efficient to examine all the claims in the instant case as a search for one Group would necessarily require a search for the other. Also, the fact that Invention I

and Invention II are in different classification should not be determinative of restriction practice. However, to facilitate the prosecution of this case Applicants herein confirm the election to examine claims 1 to 39 of Group I with traverse and reserve the right to file divisionals for the non-elected claims 40 to 120, Group II.

The Examiner has rejected claims 1, 2, 9 to 11, 16, 17, 20, 21, 25 and 26 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,034,481 to Funk, et al. (Funk). The Examiner states that Funk discloses (1) "a Ziegler olefin polymerization catalyst which incorporates a chromium alkylsalicylate," (2) that "the weight percent of chromium alkylsalicylate to polymerization catalyst is 19%", and (3) that "the catalyst and metal carboxylic acid salt are allowed to mix for one hour before polymerization. See column 4, Example, lines 50 to 68."

Applicants have amended claims 1, 10, 20 and 30. Thus, since Funk does not disclose each and every element of the amended claims this rejection should be withdrawn.

The Examiner has rejected claims 1, 2, 10, 11, 17, 20 and 21 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,919,185 to Takebe, et al. (Takebe). The Examiner states that Takebe discloses a Ziegler-Natta polymerization catalyst system of  $\text{TiCl}_3/\text{AlCl}_3$  solid, a triethylaluminum cocatalyst, and a chromium alkylsilicylate.

For the same reason as above, Takebe does not disclose each and every element of the presently claimed invention. Thus, it is respectfully requested that this rejection also be withdrawn.

The Examiner has rejected claims 1 to 39 under 35 U.S.C. §103(a) as being anticipated over EP 0 679 661 B1 to Shinozaki, et al. (Shinozaki) in view of Takebe. The Examiner states that Shinozaki discloses conventional supported Ziegler-Natta type catalysts for olefin polymerization, where the catalyst comprise a titanium compound, a magnesium compound, an organoaluminum compound and various electron donor compounds. Further stated by the Examiner is that this titanium compound can be of the formula  $\text{Ti}(\text{OR})_g\text{X}_{4-g}$  or a bulky ligand metallocene  $\text{ML}_x$  type catalyst compounds, including where the two cyclopentadienyl rings are bridged. The Examiner also states that Shinozaki fails "to disclose an organoaluminum co-catalyst that is a carboxylate metal salt of the formula  $\text{MQ}_x(\text{OOCR})_7$ , in particular they fail to disclose either aluminum monostearate, aluminum di-stearate, or aluminum tri-stearate." The Examiner also states that Takebe teach that a Ziegler-Natta polymerization catalyst can run longer and more continuously if a polyvalent metal salt of a carboxylic acid is added to the polymerization and that "a suitable polyvalent metal carboxylic and salt include those of aluminum and higher fatty acids, which stearic acid is considered to be." Thus, the Examiner concludes that it would be obvious to one of ordinary skill in the art of Ziegler-Natta olefin polymerizations to use the system of Shinozaki as modified by Takebe by adding an aluminum stearate salt to the polymerization process with the motivation that a polymer would not adhere to the reactor as stated in Takebe.

Applicants respectfully disagree with the Examiners rejection.

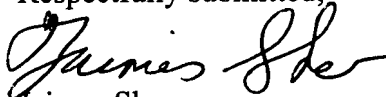
The Examiner states that Takebe discusses a Ziegler-Natta catalyst system and not a bulky ligand metallocene-type catalyst system as is presently claimed. Also, the Examiner states that Shinozaki does not discuss the carboxylate metal salt as is claimed. Thus, the motivation for combining these two documents is improper. It would not be obvious to substitute the non metal salt of Shinozaki with that as claimed. There is no motivation to do this. Furthermore, it would not be obvious to substitute a chromium salicylate catalyst with a bulky ligand metallocene-type catalyst as is presently claimed.

Therefore, it is respectfully suggested that this rejection under 35 U.S.C. 103(a) be withdrawn.

Thus, it is respectfully solicited that all claims 1, 4 to 10, 13 to 20, and 23 to 39 are now in condition for allowance and a prompt notice of allowance be issued.

Should the Examiner have any questions or require any additional information please contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jaimes Sher", written in a cursive style.

Jaimes Sher

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